1. (Original)   System for allowing a user, by use of a remote controller, to control the operation of appliances located in different sub-environments of an environment, comprising:

    a) a plurality of sub-environments' recognition means, each of which is allocated to a respective sub-environment and equipped with a code unique to said respective sub-environment; and

    b) a remote controller, provided with means and configured to obtain from said recognition means location signal that contains said unique code to recognize thereby the sub-environment said controller is currently in, said controller introducing to said user, in response to the recognition of a sub-environment, control options relevant only to appliances located in the recognized sub-environment, said controller including user interaction means to allow said user to activate said control options as desired by him.

2. (Original)   System according to claim 1, in which the location signal is obtained by detecting the presence of the user by the recognition means, said recognition means responding to the detection by transmitting said location signal to the controller.

3. (Original)   System according to claim 1, in which the location signal is obtained by emitting an inquiry signal by the controller, which is intended to be received by a corresponding recognition means, and receiving said location signal from said recognition means in response to said inquiry signal.

4. (Original)   System according to claim 1, further comprising, per desired appliance, appliance's identification means, the controller being provided with means for communicating with said identification means, for allowing the identification of said appliance by said controller whenever said controller is currently in the vicinity of said appliance, said controller introducing to the user to activate control options relating directly to the identified appliance.

5. (Currently Amended)   System according to claim 1 ~~claims 1 or 4~~, in which the identification and recognition means comprise a set which includes an electronic

Tag/beacon and a reader, essentially as described and illustrated and with particular reference to the examples.

6. (Canceled) ~~System according to claim 5, in which each electronic Tag/beacon is either embedded into, affiliated into, combined with, or incorporated into a corresponding appliance, and wherein said reader is either a 'stand-alone' device, adjoined to the controller, or affiliated into, combined with, or incorporated into the controller.~~

7. (Original) System according to claim 1, further comprising "IR-to-RF" and "RF-to-IR" converters, for allowing the user to control appliances that are not necessarily in the same sub-environment as said controller.

8. (Original) System according to claim 1, in which the controller comprises:
   a) communication means, as required for communication with the recognition and identification means for recognizing said sub-environments and appliances, respectively;
   b) control means, including a processor, a memory and software for operating said processor;
   c) an optical or acoustic, or both optical and acoustic, means for introducing to the user sub-environments, appliances and control options, and, in particular, appliances and their control options which relate to recognized sub-environments; and
   d) interaction means for: (1) allowing said user to choose a particular sub-environment or a particular appliance, or appliances, that he wishes to control; and (2) for allowing said user to control the chosen appliance or appliances.

9. (Canceled) ~~System according to claim 8, in which the controller further comprising bidirectional wireless telephone interface for imparting said controller capabilities of a cellular telephone, including the capability of communication with the Internet infrastructure.~~

10. (Original) System according to claim 8, in which the optical means is a screen, or a touch screen, functionally divided into at least a first, second and third sections, said

first section introducing to the user symbols that represent, or relate to, the sub-environments, said second section introducing to said user the appliances belonging to a currently recognized sub-environment, and said third section introducing to said user symbols representative of control options relating to an appliance chosen by said user, or to an identified appliance, said first, second and third sections having a basic size.

11. (Original) System according to claim 10, in which upon recognition of a specific sub-environment, said sub-environment is introduced to the user for selection by enlarging the first section, relative to its basic size, then by bringing the symbol, which represents said specific sub-environment, to the center of said first section, if not already there, and, finally, by making the appearance of said symbol outstanding with respect to the other symbols in said first section, and wherein upon selection of said sub-environment by said user, said first section resuming its basic size, whereas the second section is enlarged, relative to its basic size, to offer said user to select one of the appliances relating to said sub-environment, and wherein if a specific appliance, from among the appliances of said specific sub-environment, is identified by said controller, said specific appliance is introduced to the user for selection by bringing the symbol, which represents said specific appliance, to the center of said second section, if not already there, and, finally, by making the appearance of the symbol, relating to said specific appliance, outstanding with respect to the other symbols in said second section, and wherein upon selection, by said user, of the offered appliance, said second section resuming its basic size, whereas the thirst section is enlarged, relative to its basic size, to offer said user control options to control said specific appliance.

12. (Original) System according to claim 9, in which the controller is user-configurable, to allow said user to:
- preset the controller with available appliances and sub-environments, and to relate each one of said appliances to a corresponding sub-environment;
- relate voice files to one or more of the icons that represent sub-environments and/or appliances and/or operational functions, for allowing the controller to announce to the user current options and status of the controller;

- program user defined macros, which relate to one or more sets of tasks, each of said macros being intended to be executed by said user using a single interaction with said controller, to perform the set of tasks related to the executed macro;

- preset one or more alerts, for reminding the user of tasks to be performed by him, and, if desired, for operating said controller as an alarm clock; and

- memorizing telephone numbers in the form of a list, and modifying the list as desired by said user.

13. (Canceled) ~~System according to claim 12, in which the voice files are obtained by digital recordation of a person's voice or by using text-to-voice software tools.~~

14. (Canceled) ~~System according to claim 1, in which one or more of the appliances is connected to the power line via an "X10" adapter, via which said one or more appliances are controlled by the controller, said controller being programmed to communicate with a corresponding "IR-to-X10" interface, which is electrically connected to said power line, to forward thereby, and via said power line and said "X10" adapters, the control commands to the respective appliances.~~

15. (Original) System according to claim 11, in which the appliance or appliances groups are displayed optically by showing graphic symbols.

16. (Original) System according to claim 12, in which the appliances or appliance groups are displayed acoustically by sounding acoustic symbols.

17. (Canceled) ~~System according to claim 8, in which the interaction between the user and the controller is implemented by either using a 'Normal interaction'; (2) 'Full acoustic interaction'; or (3) 'Half acoustic interaction', essentially as described and illustrated and with particular reference to the examples.~~

18. (Original) System according to claim 4, in which the communication between the identification means and the controller occurs whenever said controller is within a predetermined range, which dynamically changes according to user input feedback being recorded in said controller.

19. (Original) Method for allowing a user, by use of a remote controller, to control the operation of appliances located in different sub-environments of an environment, comprising associating appliances to sub-environments and performing:

a)   a first step, according to which said controller recognizes a sub-environment in which it is currently located; and

b)   a second step, according to which said controller introduces to said user, for control, only the appliance, or a group of appliances, that is/are associated, or located, in the recognized sub-environment, and said user interact with said controller to control said appliance, or appliances.

20. (Canceled)   ~~Method according to claim 19, wherein the interaction between the user and the controller is implemented by either using a 'Normal interaction'; (2) 'Full acoustic interaction'; or (3) 'Half acoustic interaction', essentially as described and illustrated and with particular reference to the examples~~.

21. (Original) Method according to claim 19, further comprising associating to desired appliances identification means, the controller being provided with means for communicating with said identification means, for allowing the identification of said appliances by said controller whenever said controller is currently in the vicinity of a specific appliance, said controller introducing to the user to activate control options relating directly to a currently identified appliance.

22. (Original) Method according to claim 21, wherein the communication between the identification means and the controller occurs whenever said identification means is within a predetermined range, which dynamically changes according to user input feedback being recorded in said controller.

23. (Original) Method according to claim 20, wherein the controller comprises optical means, being a screen or a touch screen display, which is functionally divided into at least a first, second and third sections, said first section introducing to the user symbols that represent, or relate, to the sub-environments, such that the symbol relating to a recognized sub-environment is made by the controller outstanding with respect to the symbols relating to the other sub-environments, said second section

introducing to said user the appliances belonging to a currently recognized sub-environment, such that a symbol, representative of an identified appliance, is made by said controller outstanding with respect to symbols representative of the other appliances, and said third section introducing to said user symbols representative of the control options relating to the appliance chosen by said user, or to the identified appliance.

24. (Canceled) ~~Method according to claim 23, wherein the appliances are introduced to the user by performing the steps of:~~

~~a) displaying to the user, in a circular queue arrangement, iconic representations of the appliances which the remote controller is setup to control;~~

~~b) accepting input from the user, said input indicating to said controller which of said appliances the user desires to control; and~~

~~c) displaying the iconic representation of said appliances such that the iconic representation of said selected appliance is moved to a predetermined position in the circular queue arrangement relative to the remaining iconic representation and is given an appearance distinct from the appearance of the remaining iconic representations within the circular queue arrangement to thereby indicate to the user the current operational mode of the remote control.~~

25. (Original) Method according to claim 19, wherein the controller recognizes a sub-environment by accepting from recognition means, with which said sub-environment is provided, a corresponding location signal.

26. (Original) Method according to claim 25, wherein the location signal is obtained by detecting the presence of the user by the recognition means, said recognition means responding to the detection by transmitting said location signal to the controller.

27. (Original) Method according to claim 25, wherein the location signal is obtained by emitting an inquiry signal by the controller, which is intended to be received by a corresponding recognition means, and receiving said location signal from said recognition means in response to said inquiry signal.

28. (Currently Amended)   Method according to <u>claim 19</u> ~~claims 19 or 21~~, wherein the identification and recognition means comprise a set which includes an electronic Tag and a reader, or a beacon, essentially as described and illustrated and with particular reference to the examples.

29. (Canceled)   ~~Method according to claim 28, wherein each electronic Tag is either embedded into, affiliated into, combined with, or incorporated into a corresponding appliance, and wherein said reader is either a 'stand-alone' device, adjoined to the controller, or affiliated into, combined with, or incorporated into the controller.~~

30. (Original) Method according to claim 19, further comprising allowing the user to control appliances that are not necessarily in the same sub-environment as said controller by use of "IR-to-RF" and "RF-to-IR" converters.

31. (Canceled)   ~~Method according to claim 19, wherein the controller is provided with means, and configured to, operate as a cellular telephone, including communicating with the Internet.~~

32. (Canceled)   ~~Method according to claim 19, wherein the controller is user-configurable, to allow the user to:~~
~~—preset the controller with available appliances and sub-environments, and to relate each one of said appliances to a corresponding sub-environment;~~
~~—relate voice files to one or more of the icons that represent sub-environments and/or appliances and/or operational functions, for allowing the controller to announce to the user current options and status of the controller;~~
~~—program user-defined macros, which relate to one or more sets of tasks, each of said macros being intended to be executed by said user using a single interaction with said controller, to perform the set of tasks related to the executed macro;~~
~~—preset one or more alerts, for reminding the user of tasks to be performed by him, and, if desired, for operating said controller as an alarm clock; and~~
~~—memorizing telephone numbers in the form of a list, and modifying the list as desired by said user.~~

33. (Canceled) ~~Method according to claim 32, wherein the voice files are obtained by digital recordation of a person's voice or by using text-to-voice software tools.~~

34. (Canceled) ~~Method according to claim 19, wherein one or more of the appliances is connected to the power line via an "X10" adapter, via which said one or more appliances are controlled by the controller, said controller being programmed to communicate with a corresponding "IR-to-X10" interface, which is electrically connected to said power line, to forward thereby, and via said power line and said "X10" adapters, the control commands to the respective appliances.~~

35. (Canceled) ~~Method according to claim 19, in which the appliance or appliances groups are displayed optically by showing graphic symbols.~~

36. (Canceled) ~~Method according to claim 33, in which the appliances or appliance groups are displayed acoustically by sounding acoustic symbols.~~

37. (Canceled) ~~System according to claim 1, in which the communication means include Bluetooth or Wi-Fi transceivers.~~

38. (Original) A remote control extender, for extending the control range of the operation of appliances without introducing line of sight limitations, comprising:

   a) a wireless transceiver for communicating with a user interaction means, for allowing said user to activate control options in said appliances;

   b) an integrated circuit, consisting of:

- a memory, in which IR codes, required for activating said control options, are stored;

- a processor, for receiving control data being the selected appliance and associated functionality, for associating said control data with the desired IR code, and for forwarding said desired IR code to an IR transmitter; and

- an IR transmitter, connected to said processor, for transmitting said desired IR code to said selected appliance.

39. (Original) A remote control extender according to claim 38, having a unique ID that can be identified by the user interaction means, for allowing said user interaction means to selectively communicate with said remote control extender.